

LOCAL PHYSICAL AND LAND USE DEVELOPMENT PLAN JUSTIFICATION REPORT

Prepared By

INTERNATIONAL PROJECT PLANNING AND MANAGEMENT CONSULTANTS LTD

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1.0 INTRODUCTION

Tatu City is a new city located in Ruiru Subcounty, Kiambu County. Kenya's first operational Special Economic Zone (SEZ), Tatu City is owned and developed by Rendeavour, the largest new city builder in Africa. The city has been recognized by the Kenya Government as a flagship private sector Vision 2030 project. The new city is set on two pieces of land, Land Registration number 28867/1 and 31327, measuring 1948.96 hectares in total.

The overall approach to planning and development of Tatu City Local Physical and Land Use Development Plan (LPLDP) was and has always been participatory, inclusive, and strategic. This approach provided an opportunity to analyze social, economic, environmental, and technical issues that provided the strategic basis for development of common vision and practical strategy for urban development. Furthermore, it offered a chance to contextualize planning area's transportation, environmental settings, and land use linkages.

Ruiru and Nairobi Metropolitan Region (NMR) at large faces acute urban issues that have led to unsustainable and inefficient urban development. These issues manifest themselves in the form of poor and inadequate housing, environmental degradation, poor transport and infrastructure, and unemployment, among others.

Tatu City LPLDP provides a comprehensive mixed use, which includes low, medium, and high-density residential, commercial, light industrial, public purpose and well-developed infrastructure. The proposed mixed use has already gone a long way in addressing some of NMR urban issues. Tatu City provides job opportunities, public amenities, and housing, among others. Specifically, a significant amount of land, which is about 19% of the entire Tatu City, has been set aside for high density residential development. This will provide a great opportunity to develop low-cost housing in Tatu. Developers such as Unity Homes have already delivered the first phases of thousands of low-cost units in Tatu City.

Furthermore, the overall design is pivoted on the movement networks as the key structuring elements. These movement channels are Ruiru-Kiambu Road (B115), Ruiru-Githunguri Road (C65) and Ngenda Road (D399). These networks support and enhance public transport facilities and focus on integration of public transport facilities with urban development. This is helping in addressing transportation challenges in Ruiru and the wider NMR.

Owing to Tatu City's magnitude in terms of investments and its significant contribution towards the Kenya's economy, the Government declared Tatu City a SEZ and Special Planning Area. This further paved the way for the designation of the city as a Project of Strategic National Importance pursuant to the Physical and Land Use Planning Act (2019). This has enabled Tatu City establish a one-stop shop where all planning approvals are facilitated.

To ensure that Tatu City's vision and objectives are achieved, development guidelines and regulations have been formulated for both public realm and private realm. A summary of these guidelines has been given in this report; however, reference can be made to Tatu City Physical Planning Guidelines (Development Guidelines and Regulations), Tatu City Architectural Guidelines for Kijani Ridge, Tatu City Industrial Park (TIP) and Tatu City Central Business District for comprehensive guidelines.

Tatu City Development Control Company (DCC) is the body overseeing implementation and enforcement of Tatu City development guidelines and regulations. The members include a city planner, a civil engineer, and a leading architect, all of whom are all appointed by Tatu City Limited.

1.1 Purpose and Scope

The content of the justification and summary report for the amendments of the LPLDP includes:

- A background and development.
- The site context, description, and existing conditions.
- Key proposed amendments and its justification.
- Conclusion and recommendations.

1.2 Reasons for Amendment of Tatu City LPLUDP

Section 51 of the Physical and Land Use Planning Act (PLUPA-2019) provide grounds that may necessitate the amendment or revision of the Local Physical and Land Use Development Plan. It stipulates that LPLUDP can be amended or revised when:

- (a) there are practical difficulties in the implementation of the plan; or
- (b) there has been change of circumstances since the plan was approved.

The amendment of the Tatu City LPLUDP has been informed by the provision of Section 51 (1), specifically, part (b) of the PLUPA. The circumstances that have contributed to the amendment of the plan are as outlined below:

1. The 2019 Tatu City LPLUDP was based on 2014-2016 land use model, which has been overtaken by current and expected future market demands. Considering that Tatu City is a privately developed city, the proposed amendments are intended to create a more flexible, market-responsive city designed to meet the changing needs of the growing population. As such, there is need to provide more land for high density residential developments. More land for affordable housing has therefore been provided for within the amended plan.

- 2. As the City continues to develop more people continue to move in. With the growth of the city, the number of vehicles also increase generating more vehicular traffic. Therefore, road safety become even more critical when planning for sustainability. For example, road accidents have been witnessed at the junction of B115 and D399 thus the need for roads realignment. Tatu City intends to realign some of the road networks in order to improve the traffic flow and safety.
- 3. The revision also intends to ensure that land uses are compatible and complementary to each other in form of scale, traffic and operational impact.
- 4. Tatu City is expected to attract thousands of people (residents and daytime population), hence the supply of adequate services such as water, power, sewer, electricity and transport should be adequate. The revised plan proposes to increase the amount of land set aside for public utilities to meet the demand.

Some of the Action Area plans have been amended to achieve the above-mentioned aspects. These Action Areas are 1AA; 1AB; 1BA; 1BB; 2A; 2B; 3A; 3BA; 3BB; 4A-1; 4B-1; 6A; 6B; 6C; 7; 8 and 9.

2.0 BACKGROUND TO TATU CITY DEVELOPMENT

2.1 Development Vision

Tatu City is a new city on Nairobi's doorstep with homes, schools, businesses, a shopping district, medical clinic, nature areas and recreation for more than 250,000 residents and tens of thousands of day visitors. Tatu City's schools educate thousands of students daily, a range of homes suits all incomes, and more than 60 businesses thrive in the country's first operational Special Economic Zone. Tatu City represents a new way of living and thinking for all Kenyans in a live, work and play environment that is free from traffic congestion and long-distance commuting.

Tatu City is in the path of Kenya's urban expansion and:

- 24km from Nairobi's Central Business District
- 30 minutes-drive from Westlands
- 5km from exit 11 on Thika Superhighway
- 2km from both the Northern and Eastern Bypasses
- 40km from Jomo Kenyatta International Airport

Tatu City development was conceived in 2008. The vision for Tatu City is the creation of a world-class, mixed-use city, which is one-of-a-kind in Africa. The vision is centred on the concept of live-work-play, and it is to create a vibrant, decentralized node to the north of Nairobi City.

Tatu City dream has come to reality, with local and global companies being attracted to the city. Furthermore, tens of thousands of jobs have been directly and indirectly created in Tatu City over the last six years.

2.2 Tatu City Planning Status

Rendeavour, a privately funded new city developer, initiated the preparation of Tatu City LPLDP in 2008, and the first approval was issued by Ruiru Municipal Council in 2011. Since then, it has been amended to reflect the business environment and market demand, with the latest amendment and approval given in 2019.

Owing to Tatu City's investment magnitude and contribution towards the Kenya's economy, the Cabinet Secretary of Industry, Trade, and Cooperatives declared Tatu City a Special Economic Zone as per the Gazette Notice No. 4892 published in the Kenya Gazette Vol. CXLX-No. 66 of 22nd May 2017. The declaration covers approximately 1849.09 hectares (both phase 1 and 2-less wayleaves and reserves). The status has helped Tatu City – and Kenya – attract more than KES 130 billion of investment through

investment incentives. Investors are also attracted to Tatu City because of its Development Control Company (DCC), which ensures the city is developed according to the vision of its master plan.

Tatu City was also declared a Special Planning Area in pursuant to the repealed Physical Planning Act CAP 286 and provisions of Section 23 (1). The notice was published under Gazette Notice No. 4925 dated 7th of June 2019. The declaration was done prior to the commencement of the Physical and Land Use Planning Act of 2019. This further paved the way for the designation of Tatu City as a Project of Strategic National Importance pursuant to the Physical and Land Use Planning Act (2019).

Tatu City is also one of the key projects that contribute immeasurably towards the achievement of Kenya Vision 2030. Tatu City's contributions cut across social and economic pillars. Some aspects of social pillar, for example, include contribution towards education and training, environment, urbanization, and housing.

The following chapter provides a regional and local site context of Tatu City, specifically within Nairobi and Ruiru Subcounty. This is in form of accessibility and surrounding developments. Furthermore, review of applicable legislations, policies and development plans has been carried out, and how Tatu City LPLDP responds to these laws and policies.

3.0 SITE CONTEXT, DESCRIPTION AND EXISTING CONDITIONS

3.1 Nairobi Metropolitan Region Context

Tatu City is located approximately 24km northeast of Nairobi Central Business District (CBD). The city borders Ruiru town. Its location within the NMR is quite strategic and unique, as it is in the direction of continuously expanding urban development.

From the Nairobi context, the city is highly accessible. The primary road networks that have opened the area and its surroundings are:

- Thika Road (A2) trunk road that lies about 4km to the east/southeast of Tatu City, and A2 can be accessed via Ruiru-Kiambu Road or Ruiru-Githunguri Road. Both these roads traverse the southern part of Tatu City phase 1 and phase 2, respectively.
- The Eastern and Northern Bypasses are also critical links providing access to regions out of Nairobi and to Jomo Kenyatta International Airport (JKIA) and Wilson Airport, among other important transport installations. The Eastern Bypass terminates closer to the eastern boundary of Tatu City phase 1, whereas Northern Bypass terminates about 0.5 kilometres to the east of the site.

It is worth noting that all developments, which include commercial and light industrial, are setting up their bases in Tatu City. As a matter of fact, most of these light industrials, such as Chandaria, Dormans, Kim-Fay and Davis & Shirtliff, are shifting their main operations from other industrial areas like Baba Dogo and Industrial Area in Nairobi to Tatu City; hence, these road networks will ease the transportation of goods to other destinations within and beyond Kenya.

Given that landlocked countries like Uganda, Rwanda, South Sudan, and as far as Democratic Republic of Congo (DRC), rely on Kenya for goods and services from the port of Mombasa and commercial places, these networks will play quite an important role for transportation of goods and services. The government will complete the dualization of the Eastern Bypass by the end of 2022, and there are plans to dualize the Northern and Southern Bypasses, which will further cut travel cost and man-hours lost in traffic.

3.2 Tatu City Location in Ruiru Context

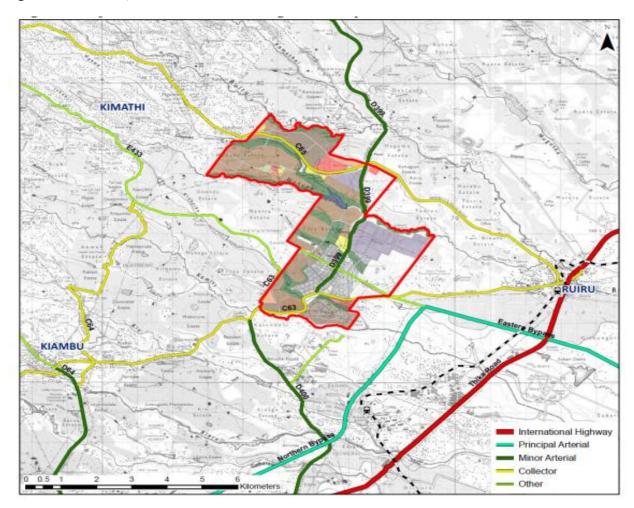
Tatu City, as previously mentioned, is in Gitothua, Ruiru Subcounty, and lies approximately 5km to the west of Ruiru CBD. The immediate surrounding developments include:

- Kenya Prisons Training College to the east and south of Tatu City phase 1 and phase 2, respectively.
- Residential developments located to the east.
- BTL, an unplanned settlement to the southwest of Tatu City phase 1; and
- Agricultural land, partially converted to housing developments, to the west and north.

Existing secondary roads that connect Tatu City with the rest of Ruiru Subcounty and Kiambu at large are:

- Ruiru-Kiambu Road (B115) running through the southern part of the site and links up with the Eastern and Northern Bypass.
- Ruiru-Githunguri Road (C65) connects the site with Ruiru town and the A2.
- Ngenda Road (D399) runs in a south to north direction and connects B115 with C65.

Figure 1: Tatu City Location



Source: Adopted from ARUP Report, 2018

3.3 Site Description & Existing Conditions

As mentioned earlier, Tatu City phase 1 has seen a large transformation from agricultural areas to urban development. Construction activities are widespread in large parts of phase 1 of the city, including roads and services such as sewer systems, electricity supply, water supply, fibre, schools, residential and industrial buildings. As mentioned in the report, thousands of residential, institutional, and industrial sites have been completed and are already occupied. The photographs below are some examples of the site conditions¹.

Figure 2: Complete residential buildings in Tatu City phase 1





Source: Site Photos, 2021

Figure 3: Construction activities taking place in Tatu City phase 1





Source: Site Photos, 2021

¹ A wetland buffer zone is an area of vegetation which begins from the boundary of a wetland's temporary zone (wetland edge) and extends outward.

Tatu City phase 2, on the other hand, is still largely occupied by agricultural activities. There are also light industrial activities mainly for drying the coffee harvests. However, in due course, focus will shift to Tatu City phase 2 in terms of infrastructure and urban development. It is worth noting that Kenya Wine Agency Limited already (KWAL-refer to figure 6 in subsequent page) is in the process of establishing their base in Tatu City phase 2.

Figure 4: Existing Conditions in phase 2 and KWAL site





Source: Site Photos, 2021

3.4 Surrounding Land Uses

Tatu City phase 1 is predominantly surrounded by residential and a few agricultural farms, with exception being institutional, which is Kenya Prisons Training College located directly to the east and south of Tatu City phase 1 and Tatu City phase 2, respectively.

The blocks to the southeast of Tatu City phase 1 are mainly low-rise permanent and semipermanent structures that are unplanned. To the west and southwest are a mix of single dwelling residential components and agricultural activities.

Tatu City phase 2 is majorly surrounded by farmlands to the north and west. To the east are residential developments emerging on the outskirts of Ruiru town expanding along Ruiru-Githunguri Road in form of corridor developments.

3.5 Future Potential Pattern of Development

One of the existing development directions of NMR is towards the north, which makes Ruiru Subcounty, where Tatu City lies, a township with a key goal of decongesting Nairobi City. Ruiru Subcounty has the capacity to absorb a significant amount of people, activities as well as investments.

Several key factors in the Subcounty that influence development include its proximity to Nairobi City County, accessibility, and existing institutions of higher learning, among others, and are discussed below.

First and foremost, Ruiru Subcounty has a locational advantage because of its proximity to Nairobi City, and it is highly accessible by rail and road. Furthermore, the Subcounty is located at the intersection of Nairobi-Thika/Northern and Eastern Bypass thus making it potential transport hub, which can be developed in line with Traffic Oriented Development (TOD) principles and strategies. Ruiru Subcounty also has relatively available land for urban development, affordable land prices and rents and a young and educated population.

Tatu City therefore lies in the best possible location for urban development within Ruiru Subcounty due to accessibility and its proximity to Ruiru and Kiambu town as well as Nairobi City. The expansion of Eastern Bypass and the planned Bus Rapid Transport (BRT), spearheaded by the government, will also improve the movement of people and goods in and out of Tatu City. These factors and development trend within the Subcounty and NMR will further strengthen the implementation of Tatu City.

3.6 Land Tenure System

When Tatu City was initially planned, the site boundaries of phase 1 covered an area of 996.6 hectares. The development area, however, was subdivided into two portions resulting into LR. No. 28867/1 and 28867/2. LR. No. 28867/1 remained to form Tatu City phase 1.

Presently, the entire development site comprises of LR. No. 28867/1 and LR. No. 31327 measuring 963.87 hectares and 885.22 hectares respectively. In respect to land tenure and ownership, Tatu City Limited owns the above-mentioned properties, and is registered under Registration of Titles Act CAP 281 of the Laws of Kenya as a leasehold tenure for a period of 99 years from the year 2008.

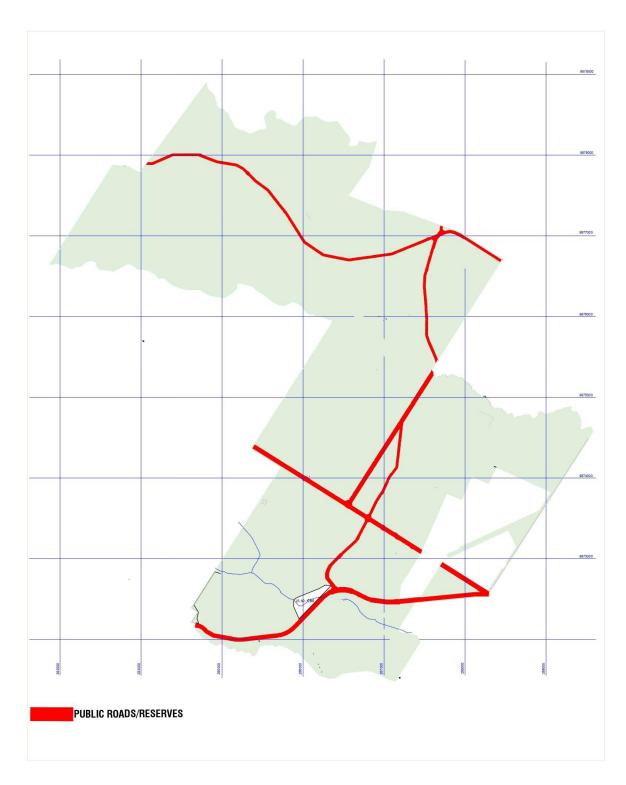


Figure 5: External Boundaries for Tatu City phases 1 and 2

Source: Author, 2022

4.0 PROPOSED AMENDMENTS & JUSTIFICATION

4.1 Overview

The 2019 Tatu City LPLDP was based on 2014-2016 land use model, which has been overtaken by current and expected future market demands. The proposed amendments are intended to create a more flexible, market-responsive city designed for the changing needs of the growing population. The plan is to increase land for development of affordable housing. This has, therefore, necessitated the revision of the 2019 LPLDP.

The plan has also been amended to increase the amount of land for public utilities as well. Due to the fact that the development has attracted thousands of commercial, residential, and industrial premises, more energy is needed to power all these uses, and some of the Action Areas have been amended to achieve this intention. These Action Areas are 1AA; 1AB; 1BA; 1BB; 2A; 2B; 3A; 3BA; 3BB; 4A1; 4B-1; 6B; 6C; 7; 8 and 9.

4.2 Summary of the Amendments

The proposed changes have been summarized in the table 1.

Table 1: Summary of the Proposed Amendments

Action	Approved LPLDP	Proposed LPLDP	Reasons
Area			
Phase	Apart from commercial, the	The high density residential has also	The mixed uses are expected to
1AA and	CBD also had high density	been relocated to other areas and	provide low-scale, high-density
1AB	residential planned for, and a	replaced with commercial land uses	residential use to ensure that the CBD
(CBD)	linear park running from one	(expected to accommodate mixed uses)	remain vibrant even at night.
	end of the CBD to the other		_
	end.		
		The linear recreational park has been	Accommodate more users and make
		readjusted and increased to suit the	them easily accessible, especially within
		needs of the users.	the CBD.

	Action Area 1AB was planned for high density residential, together with secondary nodes and educational land use (Unity East and West is on this Action Area).	In 1AB, educational use has been increased and the green space reduced in line with the flood line study undertaken. The high density residential remains the same.	
Phase 1BA and 1BB	A piece of land for club house and retail had been allocated within these Action Areas as supporting facilities to the low-density residential use.	The land size for the club house has been slightly reduced and commercial use has been replaced with low density residential. The concept design for the club house has been prepared and discussed with the stakeholders. Commercial element has been provided in 4B-1 to cater for the small-scale commercial needs of Kijani residents.	The reduction of the parcel of land for public-purpose (the club house) was informed by a survey done among the Kijani Ridge residents on the facilities that they would require within the club house.
Phase 2A	Existing Crawford International School and a proposed school was located adjacent to Crawford International. Two blocks of public purpose land are located to the east of the Action Area.	Crawford International School has been maintained in its existing location; the proposed school land has been moved to another place in Action Area 3A. The public purpose in the proposed LPLDP has been moved to a location right opposite the Crawford International School and replaced with a high-density residential land use.	The relocation of the parcel for the school was necessitated by the significant volume of traffic generated during the peak hours at current Crawford School.
Phase 2B	This phase was approved as low density residential with a green space corridor.	The phase has been re-constituted in the proposed LPLDP in accordance with the commissioned 1:100 flood line study.	The 1:100 flood line report confirms the developable portions of the city that are capable of being safely developed out of a major (1:100) flood event

Phase 3A	The phase is purely residential with a commercial land overlooking the dam.	The commercial land has been converted to low density residential and the commercial relocated to a more accessible location within the Action Area, where it is universally accessible to the public.	This is meant to create a continuity of the low- to medium-density residential along the green belt as well as reduce insecurity within the area. These locations for commercial are more accessible to the residents within and outside the area.
		High density residential has also been introduced in the Action Area.	To provide affordable housing close to working areas.
	Public purpose is located to the north of the Action Area.	The public purpose land has been relocated to the south of the Action Area.	The objective is to position the public purpose site closer to the high-density residential zones to serve majority of the population.
Phase 3 BA and 3BB	The Action Area is a light industrial zone with some pockets of recreational spaces.	The land for recreational use has been changed to high density residential to accommodate low-cost housing.	This is an ideal location for housing industrial workers thus reducing the cost and need to travel far to access the working areas.
4A-1	Phase 4-A1 (Tatu Waters) was a mixed of low and high density residential with supporting facilities like educational and public purpose.	Tatu House, which was recently designated a Customs Controlled Area, is the proposed commercial entity which replaces the educational land use.	The commercial land use will also serve as the administration headquarters for Tatu City Limited.
		Tatu primary school has been moved to the edge of the Action Area, for easier accessibility to students coming	This facility is an integral part of the residential neighborhood, as it presently serves schoolchildren from

		from BTL.	there, and it has therefore been moved closer to the main users. The relocation of the school has also been necessitated by risks of crossing the dam by the schoolchildren.
Phase 4B-1	Within the Action Area, there is no provision for a power sub-station.	2.0 hectares public utility land (power station) has been proposed.	Provided to cater for power off-take needs of Tatu City residents in future
Phase 6B	The Action Area was approved as light industrial with commercial nodes.	The commercial plots have been resized and/or increased. Staggered junctions with phase 6A have also been aligned.	The intention is to minimize traffic to key business areas like CBD thus the need to provide more land for satellite districts that will provide commercial services.
Phase 6C	Same as Action Area 6B, the zone is purposely for light industrial with supporting commercial uses and public purpose.	The retail and public purpose land areas have been resized, and retail has been slightly increased on the western fringe.	The intention is to minimize traffic to key business areas like CBD thus the need to provide more land for satellite districts that will provide commercial services.
Phase 7	Action Area 7 is high-density residential with public purpose and educational plots and public utilities.	Provision has been made for a low-density residential and additional public purpose land use provided.	The proposed location is suitable for high-end housing because it provides spectacular views of the Ruiru River and its landscape, which makes it an area of high economic value.
		Secondary nodes have also been provided on the southern end of the Action Area.	To cater for the retail needs of the residents within this Action Area as well as those working within the light industrial areas
Phase 8	Purely a low-density residential Action Area with public purpose and	High-density residential use has been introduced within the Action Area. The commercial use on the southwestern	This area is low-lying, making it suitable for development of apartments without overlooking the

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	educational land.	fringe has also been omitted. Other land uses remain as approved.	low-density developments that have been retained on the outer edges of the site
Phase 9	The Action Area is a mix of low and high density residential and includes two portions of retail directly off	The retail off C65 has been repositioned so that access is now off an internal road.	To minimize traffic flow interference.
	C65 and D399, and Ngewe primary schools.	The commercial use off D399 has been omitted in the proposed Action Area plan.	

4.1 Detailed Description of the Key Action Area Amendments & Justification

4.1.1 Action Area 1A

Action Area 1A accommodates commercial and high-density residential uses, and it is the location for the proposed Tatu City CBD. It is worth noting that D399 was upgraded to a class C road, and this necessitated the amendments of land use plan for the CBD. The key changes include relocation of the high-density developments from the core CBD to outside the CBD, and mixed land uses have been introduced in place of the high-density residential.

Furthermore, access links emanating from the CBD have been reduced to minimize disruption of traffic flow along the D399. In addition to the above, the location for the high density residential is within a walkable distance from the CBD and in line with the recommendation of TOD strategy, which helped shape the original design of Tatu City. To discourage ribbon like development, access to the buildings will be from the CBD side and not D399 (refer to figure 6).

Educational land use in phase 1AB has been slightly increased as well.

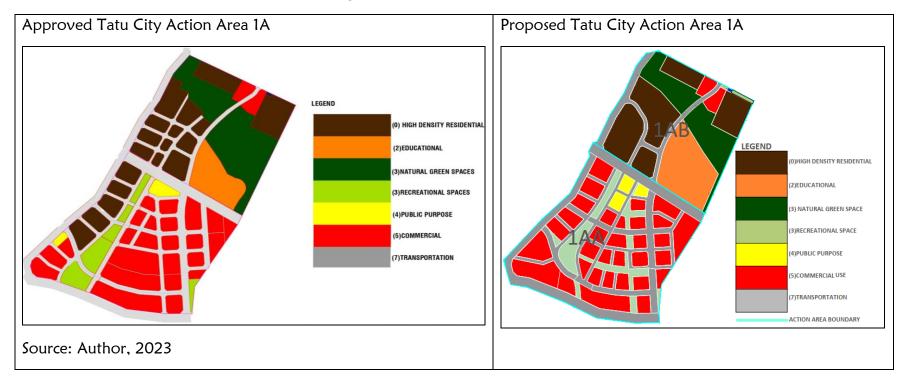


Figure 6: Approved and Proposed Action Area 1A

4.1.2 Action Areas 1B

This Action Area comprises Kijani Ridge North, Kijani Ridge Central and Kijani Ridge South. The neighborhood is a gated community with single dwelling residential plots, ranging between 0.1 hectares and 0.2 hectares. The Kijani Ridge residents will have access to a network of open recreational spaces for active and passive activities. The initial LPLDP had set aside 1.17 hectares for commercial and 3.18 hectares for a clubhouse within Action Area 1BA and commercial on the southern fringe of 1BB.

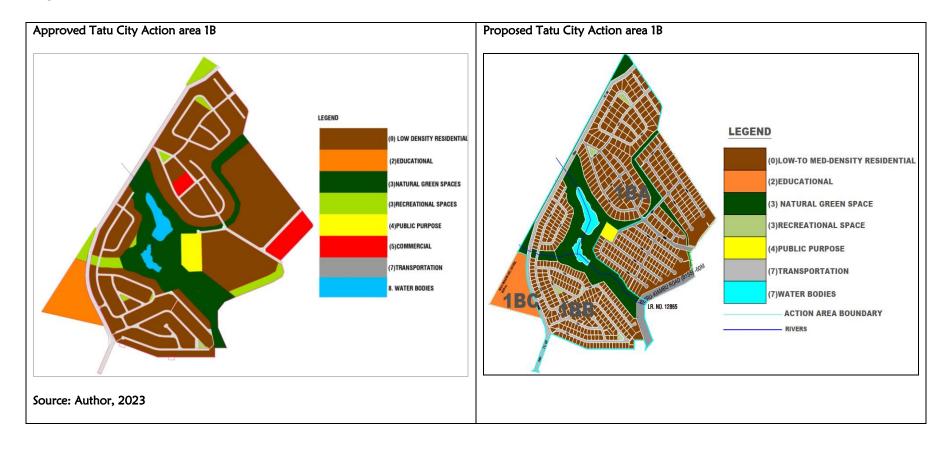
However, a substantial amount of land that will serve as the primary CBD for Tatu City is planned in phase 1. With resident population of 250,000 expected in Tatu City once fully developed, it will have a ready market, which is and will be tapped by local and international investors.

With footfall traffic expected from phase 1, phase 2 and nearby areas, the proposed CBD will be a vibrant business environment, and as such, this has informed the decision to change the commercial area to low density residential within Kijani Ridge since the neighborhood's residents are close to the CBD, and they will have access to other commercial areas as well. A commercial node has been provided in Action Area 4B-1 and it is expected to serve mainly the residents of 4B-1 and Kijani Ridge as well.

Furthermore, the public purpose (club house) has been reduced. The services that will be provided within the land set aside for the clubhouse will be adequate and will accommodate all services needed by the residents, who also benefit from a 79-acre park. These include green areas as play spaces for the children, some outdoor games as well as adequate parking spaces in addition to the club house. Tatu City has appointed a consultant to develop the design of the clubhouse and there will be further discussions on the clubhouse with Kijani Ridge residents. So far, a concept design has been developed and discussions on it are on going with the stakeholders i.e. Kijani Ridge residence.

Below are the approved and proposed amendments within the Action Area.

Figure 7: Approved and Proposed Action Area 1B



4.1.3 Action Area 2A

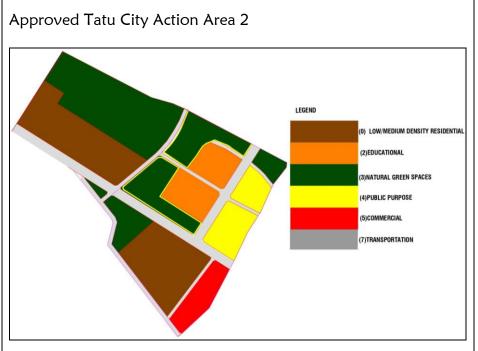
The approved LPLDP had designated this phase for low density, educational, and public purpose (a hospital and religious facilities). The major amendments in this Action Area include relocating a proposed school land to another Action Area and changing the location of public purpose, but the acreage remains the same (refer to figure 8). Presently, there is an established institution (Crawford International School), and high density residential has been introduced in this Action Area as well.

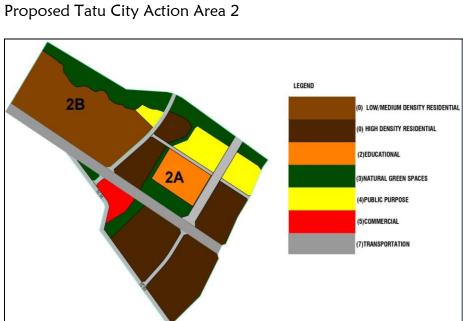
It is worth noting that the public purpose was predominant in the approved plan. According to a traffic study by ARUP (2018), on average, the peak inbound and outbound traffic per hour projection within the Action Area was 476 in the morning and 502 in the evening. On average, Crawford was projected to generate approximately 284 inbound traffic in the morning and 52 outbound traffic in the evening; however, the reality is that, now, Crawford generates a significant volume of traffic during the peak hours.

The above trend has also been observed within Nova Pioneer Primary school. Since the school was opened in 2019, it has admitted a significant number of students. During the morning and evening hours, there is massive traffic, which spills to B115. With all these in mind, it was found prudent to shift the proposed school to avert potential traffic nightmare for the residents in future.

Other changes are increasing pieces of land for high-density residential. A detailed justification for this will be explained in Section 4.1.7 of this report, where justification for increased high-density development has been provided.

Figure 8: Approved and Proposed Action Area 2





Source: Author, 2023

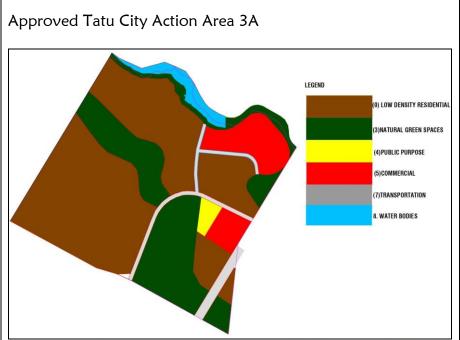
4.1.4 Action Area 3A

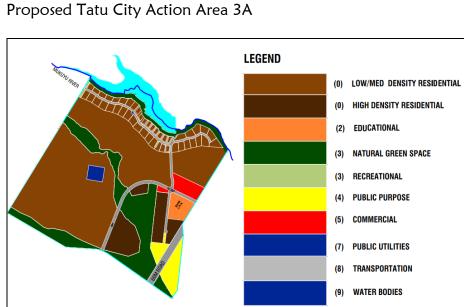
Action Area 3A was approved largely as a low-density residential neighborhood, with pockets of commercial and public purpose. The commercial block adjacent to D399 was set aside to serve as a secondary node whereas the commercial land facing the dam was planned for a high-end hotel.

The commercial section overlooking the dam has been relocated and re-sized appropriately and moved to the junction of the proposed internal road in phase 3A. The location is ideal as it will be easy to access from Unity homes and its wider neighborhood.

The reduced area has been replaced with low-density residential which is more appropriate given its strategic location overlooking the dam. The public purpose land has been relocated south of the residential plots (refer to figure 9). The objective is to position the public purpose site closer to the high-density residential zones.

Figure 9: Approved and Proposed Action Area 3



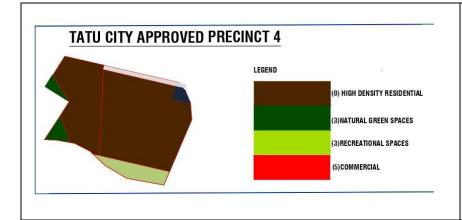


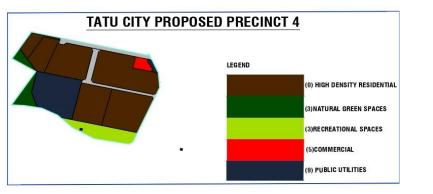
Source: Author, 2023

4.1.5 Action Area 4B-1

The key change in this Action Area is the provision of 2.0 hectares of land for power substation. The land use change is from high-density residential to public utility (power substation). In the revised overall LPLDP, provision has been made for slightly more high-density housing development that has resulted in higher projected population as compared to original, approved plan. This increase has resulted in higher demand for services such as electricity supply. Hence, it has been found necessary to provide more land for provision of public utilities. The changes are reflected in the Action Area plan below.

Figure 10: Approved and Proposed Action Area 4

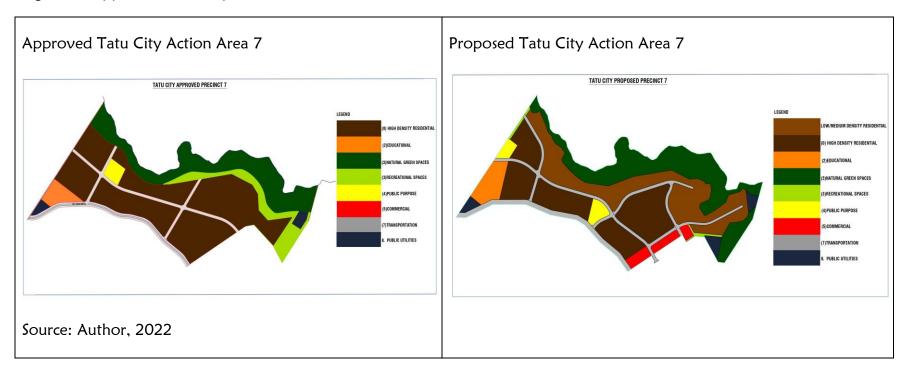




4.1.6 Action Area 7

In contrast to Action Area 8, this phase was largely set aside for high density residential development. Some slight changes have been introduced on the fringes of the Action Area, mainly on the northern edges. This portion is suitable for high end housing because it provides incredible views of Ruiru landscape. Furthermore, some commercial uses have been provided to serve as a secondary node catering the needs of the residents who will be residing here as well as those working in the industrial areas. The proposed changes are as shown in figure 11.

Figure 11: Approved and Proposed Action Area 7



4.1.7 Action Area 8

The key amendment of the LPLDP is increasing the land for high density residential development. The housing market in Kenya has been primarily dominated by the private sector, and this group has focused on provision of high-end housing.

Before the devolution and promulgation of the Constitution of Kenya 2010, the local authorities, which included city and municipal council, were involved in provision of affordable housing largely in form of rental housing; however, the policy was changed where the government became enabler through policy formulation to direct housing development.

This trend observed in the Kenyan market is a typical enabling approach, which has dominated the housing policies since the Habitat II and the 1996 Habitat Agenda. The enabling approach changed the role of the government from being sole provider to enabling housing market. The enabling approach, as described in the World Cities Report (2016), has "enabled some and disabled many." In a nutshell, the supply of adequate housing for the lower income and middle-income earners have been disabled while the high income has been enabled.

As a result, this has had significant effects on housing affordability in general. This led to the existing situation whereby the private sector has tended to supply high income housing that is out of reach to many Kenyans. It has been a major concern and real cause for alarm in Kenya. Over the years, rents as well as housing prices have gone through the roof, and this necessitated the government to launch affordable housing programme to bridge the affordable housing gap.

The Action Area, as approved in 2019, was set aside for development of low-density housing; however, from a planning point of view, this land is more suitable for high density development as the topography is low lying; therefore, allows for development of apartments without overlooking the low-density developments which have been retained on the outer edges of the site (refer to figure 8).

As mentioned earlier in the report, Tatu City was declared a Special Planning Area and Special Economic Zone. As such, it is one of the Projects of Strategic National Importance, and with this position and recognition by the government, Tatu City wants to play a greater role in delivering affordable housing products in the market. This will be achieved through provision of more land for high density residential development. Some of the affordable housing in Tatu City, including Unity Homes, have been a great success so far, which has informed the decision to significantly increase the land for affordable housing not only in phase 8 but also in Phase 3BA and 3BB.

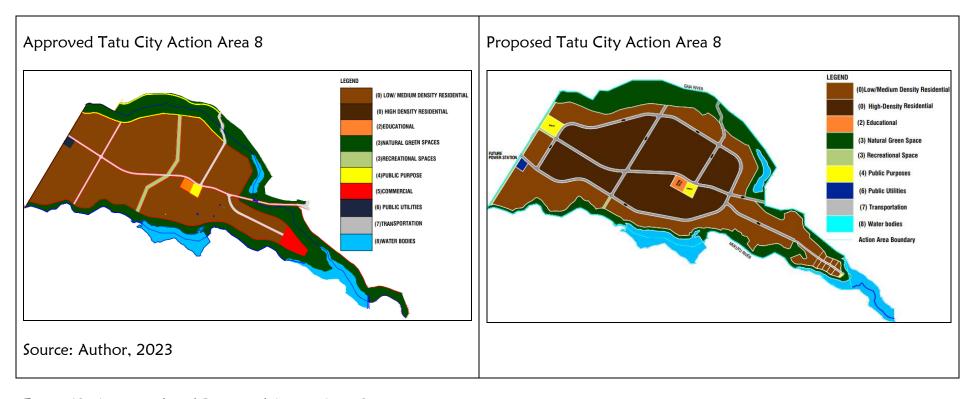


Figure 12: Approved and Proposed Action Area 8

4.1.9 Amendment of Green Open Spaces

According to the World Cities Report (2020), the world population currently living in urban areas stands at about 55%, and this is majorly due to urbanization, which occurs at a fast rate. As rapid urbanization occurs, access to nature becomes limited and environmental challenges, such as air and noise pollution, increases.

With Tatu City vision being creation of a planned and sustainable city, comprehensive measures have been put in place to ensure that the city offers healthy and sustainable living environment. The riparian land for Tatu City, as per the survey plan, is approximately 11.25 hectares. In addition to this, about 21.7% of the land was also set aside as green spaces; however, the amended LPLDP proposes a reduction of about 4.8% for a number of reasons.

For the proposed plan, a storm water modelling and 1:100 flood line study was undertaken to ascertain the requirements for the storm water capacity flow through the city once fully developed. The 1:100 flood line report confirms the developable portions of the city that are capable of being safely developed out of a major (1:100) flood event. Based on the study, the proposed LPLDP ensures that the developable land is located outside the 1:100 flood level.

Furthermore, now that residents are setting up residential homes and Tatu CBD is being developed, Tatu City has begun to take steps on urban green spaces intervention. Tatu City brought on board, for instance, renowned athletes to help in the design of green corridors such as green walking trails and cycling paths in the green spaces around Kijani Ridge.

Tatu City also intends to create user-friendly urban green spaces that will be easily accessible for all population groups, and these have been distributed equally across Tatu City (see figure 15 for reference). The city also plans to improve the quality of these spaces by introducing planting tree programmes, which will be funded by Tatu City. The quality, further, will be guaranteed through a proper management city programme. Regular maintenance will be carried out with the support of the residents. The maintenance cost will be funded through resident-funded service charge.

The proposed plan further intends to improve the functionality of these green areas by creating a more user-friendly, park-like interface for access to the residents of Tatu City and the broader public. The intention is to retain the flood-line and stormwater capacity requirements of these green areas while sculpturing the areas beyond to create user-friendly spaces for the public.

The quality of this redefined space will be ensured through a well-managed city management programme which will introduce an indigenous planting programme (funded by Tatu City) and supported by regular maintenance through a sustainable resident-funded service charge.

Figure 13: Proposed Network of Green spaces and Flood line demarcation

Presently, there is a department in charge of city management, which will ensure programmes like street greenery and urban gardens are established throughout Tatu City and near the people. It is worth noting that when reviewing development plans, Tatu City DCC also ensures that private green areas have been retained within schools, industrial and residential areas; and with all these mechanisms in place, it is anticipated that the city will be an urban area, with significant of its area left as green spaces.

4.1.10 Projected Resident Population Vis-à-vis Public Purpose

The Physical Planning Handbook (2007) provides four classifications of human settlements: market centre, rural centre, local centre, and urban centre. In addition to the above, it also provides requirements for the provision of social infrastructure, herein referred to as public purpose and/or social amenities, based on the catchment population of the settlement.

Of essence in this case is the urban centre. The Physical Planning Handbook designates an urban centre as an area with a resident and a catchment population of over 5000 and 100,000-150,000 respectively. Based on the above definition, Tatu City is deemed as an urban centre. The approximate population of Tatu City as per the following parameters is 250,000 (see appendix 1 for the tabulation).

- Land set aside for low/medium density residential: 439.13 hectares.
- Land designated for high density residential: 354.32 hectare.

Assumptions and parameters for consideration:

- 15% of the land will be used for road networks
- 10% for green spaces
- 10 units per hectare allowed for low/medium density
- 240 units per hectare allowed for high density

According to the Kenya National Bureau of Statistics Report (KNBS, 2019), the average household in Kenya is about 3.9. Taking this into consideration, the total number of resident populations expected in Tatu once fully developed is 250,000.

As a norm, in town planning, social amenities are requisite for communities as they provide for social, educational, welfare, health, spiritual, cultural, and leisure needs of the public. In addition, it plays a critical role in the development of vibrant neighbourhoods by creating a sense of place and offering opportunities for individuals to meet.

With the above in mind, land for social facilities have been set aside to take care of the above-mentioned needs of Tatu City residents. These facilities have been integrated with the other developments to create a condensed, convenient, vibrant urban environment, and build synergy as well with the other land uses.

In the amended LPLDP, the amount of land set aside for public purpose is 41.04 hectares in total whereas the educational land is 55.55 hectares. Educational land will be utilized for primary and secondary schools while social facilities land will be used for health facilities, places of worship, community centres, theatres, libraries, social halls, among others.

Tatu City guidelines allows two storeys for public institutions; hence, 2 or 3 streams per class can be attained in the city. Therefore, out of 250,000 resident population and three streams offered, about 6 secondary schools will be needed. The total land required for these schools will be 20.4 hectares and the same applies to primary schools, which will be about 10 schools, with nursery schools attached. Hence, the 55.55 hectares of land is deemed adequate to support Tatu City population. In addition, there are also primary and secondary schools outside of Tatu City that will also absorbs students from the city.

As regards social amenities, 41.04 hectares of land will be adequate as this can accommodate critical social amenities. Of importance is provision of health facilities, of which the land set aside can accommodate 3 county referral hospitals with a land of about 8 hectares each, according to the health structure system in Kenya. This translates to half of the land for public purpose, and the remaining can be utilized for other land uses like religious facilities, social halls, libraries among others.

It is also important to note that approximately 55.12 hectares of land has been set aside as recreational spaces, which will be developed as leisure and sports facilities as well as green infrastructure like parks and playing fields; all these complement the public purpose already provided, and at the same time, offer social functions to Tatu City's residents.

Table 2: Proposed Public Facilities

Land Use	Land (Hectares)	Expected Number of
		Public Facilities
Educational	55.55	4 secondary schools
		9 primary schools.
Public purpose	41.04	3 referral hospitals
		Several religious
		facilities, social
		centres, libraries,
		among others.

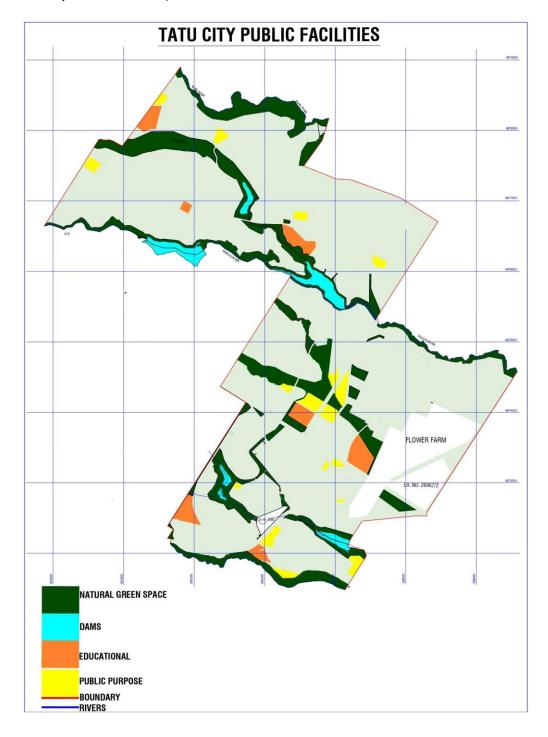


Figure 14: Proposed Tatu City Public Facilities

5.0 CONCLUSION AND RECOMMENDATIONS

In summary, Tatu City is a controlled, mixed-use new city development with residential, commercial, light industrial, recreational areas, underpinned by high-quality infrastructure. The new city is next to Ruiru, Kiambu County, and sits on two pieces of land, Land Registration Number 28867/1 and 31327, measuring 1948.96 hectares in total. It is expected to host up to 250,000 residents and will create thousands of jobs once fully developed.

Tatu City, which is Kenya's first operational SEZ, is owned and developed by Rendeavour, the largest new city builder in Africa. Tatu City has been recognized by the Kenya Government as a flagship private sector Vision 2030 project.

Presently, development is in high gear within Tatu City, with close to a thousand of building plans for both residential and industrial developments submitted to Tatu City DCC for review and approval. There are also hundreds of residential homes, as well as industrial establishments, primary and high schools already complete and occupied. Construction work in the CBD will commence in July 2022, which includes the development of two office tower blocks and retail on the ground floor.

This report highlighted the changes on the amended LPLDP and justification for the revision. The current approved plan is over 8 years old (from when the original layout was done) and is not aligned with the current market trends and demands. Furthermore, Tatu City LPLDP that was approved in the year 2019 was based on a 2014-2016 land use model, which has been overtaken by current and expected future market demands.

It is worth reiterating that the key changes are increasing high density and a conversion of non-functional and degraded green spaces, which is warranted as based on the urban nature of a city development detailed in this report. The proposed amendments are intended to create a more flexible, market-responsive city designed for the changing needs of the growing population. This has, therefore, necessitated the revision of Tatu City LPLDP.

In view of the above, it is our recommendation that the Ministry of Lands, Public Works, Housing and Urban Development grant the approval for the amendment of Tatu City Local Physical and Land Use Development Plan.

Jane Manasseh

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